METHOD AND APPARATUS FOR SUPPORTING A SEMICONDUCTOR WAFER DURING PROCESSING

Abstract of the Disclosure

A semiconductor wafer is processed while being supported without mechanical contact. Instead, the wafer is supported by gas streams emanating from a large number of passages in side sections positioned very close to the upper and lower surface of the wafer. The gas heated by the side sections and the heated side sections themselves quickly heat the wafer to a desired temperature. Process gas directed to the "device side" of the wafer can be kept at a temperature that will not cause deposition on that side section, but yet the desired wafer temperature can be obtained by heating non-process gas from the other side section to the desired temperature. A plurality of passages around the periphery of the wafer on the non-processed side can be employed to provide purge gas flow that prevents process gas from reaching the non-processed side of the wafer and the adjacent area of that side section.

.W:\DOC\$\ZYW\ZYW-1709.DOC -051303